



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

NOV 7 2000

Mr. James T. Van Sistine  
Director, Defense Programs  
Oshkosh Truck Corporation  
P.O. Box 2566  
Oshkosh, WI 54903-2566

Ref. No. 00-0281

Dear Mr. Van Sistine:

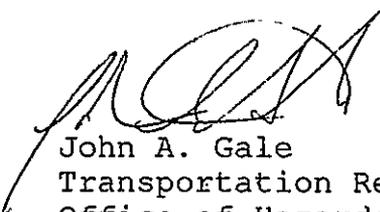
This is in response to your September 29, 2000, letter regarding the training requirements of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you request clarification on whether all your employees would require DOT training.

A hazmat employee is a person employed by a hazmat employer and who in the course of employment directly affects hazardous materials transportation safety (see § 171.8). In other words, a person who performs duties that are regulated under the HMR is considered to be a hazmat employee. Section 172.704 requires a hazmat employee to receive general awareness, function specific, and safety training. Under § 172.704(e), a hazmat employee who repairs, modifies, reconditions, or tests packagings as qualified for use in the transportation of hazardous materials, and who does not perform any other function subject to the HMR, is not subject to the safety training requirement of § 172.704(a)(3).

An employee who performs functions subject to the HMR, such as manufacturing and testing DOT specification cargo tanks is a hazmat employee. Any employee who performs a function covered by the HMR, e.g., manufactures and tests packagings as qualified for use in the transportation of hazardous materials, is a hazmat employee and therefore must be trained.

I hope this satisfies your request.

Sincerely,



John A. Gale  
Transportation Regulations Specialist  
Office of Hazardous Materials Standards

OSHKOSH TRUCK CORPORATION

ISO 9001 CERTIFIED

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BAH OSHKOSH

172.704(d)  
171.8  
Training  
00-0-281

Research And Special Programs Administration  
400 7 th Steet Southwest  
Washington, DC, 20590  
Dept: DHM-11, Attention Delmer Billings (Standards)

September 29, 2000

Subject: HAZMAT Training request for clarification.

171.8 Definitions and abbreviations  
Hazmat employee, Hazmat employer  
172.704 (d) Record keeping

Clarification:

During a recent DOT audit at the Pierce Manufacturing (Division of Oshkosh Truck Corporation) Bradenton Florida facility, Special Agent W.F. "Bill" Tyner, wrote up a violation to "172.704 (d) Record keeping" against the Bradenton facility. Bill Tyner stated that the regulation (171.8 Hazmat employee, Hazmat employer) states that all people involved with the manufacture (fabrication, welding, painting etc) and testing of the cargo tank need to be Hazmat trained.

Bradenton does have records for the people that are Hazmat trained and there are records for these people, but there are only four people trained in the facility, none of which work directly on the cargo tank. The Bradenton facility people working directly on the cargo tank (manufacture) do have general Hazmat training and know whom to call if there is a Hazmat issue/spill, but there are no records, other than incoming training procedures that all new employees receive.

The Hazmat training at Oshkosh Truck , Oshkosh Wisconsin is similar to that at Bradenton. There are a number of people that have full documented Hazmat training, but the general assembly population and truck testers do not have full, documented Hazmat training. The general assembly population and truck testers know how to handle a small spill and know whom to call in the event of a major Hazmat issue.

Bill Tyner's position is that the regulation 171.8 Hazmat employee and Hazmat employer requires all people involved with the manufacture, assembly and test of the cargo tank and cargo tank truck to be fully HAZMAT trained including documented (records on file).

I request a clarification to the regulation in the requirements for Hazmat training. I can see the point in having some people at a manufacturer fully Hazmat trained but can not believe that everyone needs this training. I contend that it is allowed to have a situation that allows for a small number of the entire population (at a facility) be fully trained. The rest of the population should be sufficient with little to no training other than an awareness of the Hazmat placards and meanings or where to go for assistance in identifying the hazards.

Background:

Oshkosh Truck Corporation provides a diesel fuel cargo tank truck to the U.S. Army, designated the HEMTT (Heavy Expanded Mobility Tactical Truck) M978. The diesel fuel cargo tank is 2,500 gallon capacity and is mounted to the truck. The truck is a highly mobile tactical on/off road truck. The Cargo tank is made in accordance with DOT 406 (49CFR Chapter 1, 178.345).

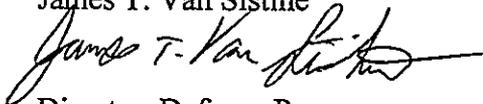
The cargo tank is manufactured (fabricated, welded tested, painted) at the Pierce Manufacturing (Division of Oshkosh Truck Corporation) located in Bradenton Florida. As part of the testing performed at Bradenton, they perform a leak test with Diesel fuel in the cargo tank to ensure that the manhole cover and outlets do not leak along with a hydrostatic test in accordance with 178.345-13.

The cargo tank is then shipped to the Oshkosh Truck, Oshkosh Wisconsin facility for final installation on to the truck chassis. The final cargo tank truck is then filled with diesel fuel and flow tested for proper performance.

I request that you call or write with any further questions regarding the clarification request and/or respond to me in writing with your position on this item.

Thank you for your attention to this matter,

James T. Van Sistine



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§ 172.704 Training requirements.

§ 172.704

(a) Hazmat employee training shall include the following:

(1) *General awareness/familiarization training.* Each hazmat employee shall be provided general awareness/familiarization training designed to provide familiarity with the requirements of this subchapter, and to enable the employee to recognize and identify hazardous materials consistent with the hazard communication standards of this subchapter.

(2) *Function-specific training.* (i) Each hazmat employee shall be provided function-specific training concerning requirements of this subchapter, or exemptions issued under subchapter A of this chapter, which are specifically applicable to the functions the employee performs.

(ii) As an alternative to function-specific training on the requirements of this subchapter, training relating to the requirements of the ICAO Technical Instructions and the IMDG Code may be provided to the extent such training addresses functions authorized by §§171.11 and 171.12 of this subchapter.

(3) *Safety training.* Each hazmat employee shall receive safety training concerning—

(i) Emergency response information required by subpart G of part 172;

(ii) Measures to protect the employee from the hazards associated with hazardous materials to which they may be exposed in the work place, including specific measures the hazmat employer has implemented to protect employees from exposure; and

(iii) Methods and procedures for avoiding accidents, such as the proper procedures for handling packages containing hazardous materials.

(b) *OSHA or EPA Training.* Training conducted by employers to comply with the hazard communication programs required by the Occupational Safety and Health Administration (OSHA) of the Department of Labor (29 CFR 1910.120) or the Environmental Protection Agency (EPA) (40 CFR 311.1) to the extent that training addresses the training specified in paragraph (a) of this section, may be used to satisfy the training requirements in paragraph (a) of this section, in order to avoid unnecessary duplication of training.

(c) *Initial and recurrent training.*—(1) *Initial training.* A new hazmat employee, or a hazmat employee who changes job functions may perform those functions prior to the completion of training provided—

(i) The employee performs those functions under the direct supervision of a properly trained and knowledgeable hazmat employee; and

(ii) The training is completed within 90 days after employment or a change in job function.

(2) *Recurrent training.* A hazmat employee shall receive the training required by this subpart at least once every three years.

(3) *Relevant Training.* Relevant training received from a previous employer or other source may be used to satisfy the requirements of this subpart provided a current record of training is obtained from hazmat employees' previous employer.

(4) *Compliance.* Each hazmat employer is responsible for compliance with the requirements of this subchapter regardless of whether the training required by this subpart has been completed.

(d) *Recordkeeping.* A record of current training, inclusive of the preceding three years, in accordance with this section shall be created and retained by each hazmat employer for as long as that employee is employed by that employer as a hazmat employee and for 90 days thereafter. The record shall include:

(1) The hazmat employee's name;

(2) The most recent training completion date of the hazmat employee's training;

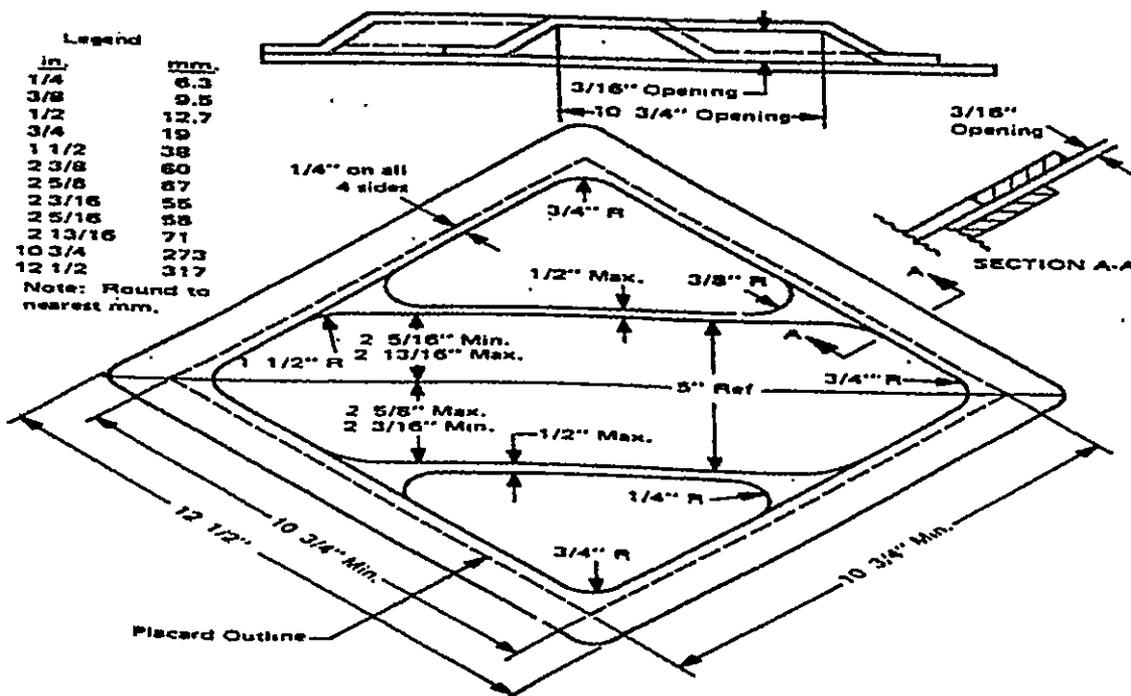
(3) A description, copy, or the location of the training materials used to meet the requirements in paragraph (a) of this section;

(4) The name and address of the person providing the training; and

(5) Certification that the hazmat employee has been trained and tested, as required by this subpart.

(e) *Limitation.* A hazmat employee who repairs, modifies, reconditions, or tests packagings as qualified for use in the transportation of hazardous materials, and who does not perform any other function subject to the requirements of this subchapter, is not subject to the safety training requirement of paragraph (a)(3) of this section.

APPENDIX C - DIMENSIONAL SPECIFICATIONS FOR RECOMMENDED PLACARD HOLDER



**§ 171.8**

acute inhalation toxicity of gases and vapors, as specified in §173.133(a).

*Hazardous material* means a substance or material, which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated. The term includes hazardous substances, hazardous wastes, marine pollutants, and elevated temperature materials as defined in this section, materials designated as hazardous under the provisions of §172.101 of this subchapter, and materials that meet the defining criteria for hazard classes and divisions in part 173 of this subchapter.

*Hazardous substance* for the purposes of this subchapter, means a material, including its mixtures and solutions, that—

- (1) Is listed in the appendix A to §172.101 of this subchapter;
- (2) Is in a quantity, in one package, which equals or exceeds the reportable quantity (RQ) listed in the appendix A to §172.101 of this subchapter; and
- (3) When in a mixture or solution—
  - (i) For radionuclides, conforms to paragraph 7 of the appendix A to §172.101.
  - (ii) For other than radionuclides, is in a concentration by weight which equals or exceeds the concentration corresponding to the RQ of the material, as shown in the following table:

RQ pounds (kilograms)	Concentration by weight	
	Percent	PPM
5000 (2270) .....	10	100,000
1000 (454) .....	2	20,000
100 (45.4) .....	0.2	2,000
10 (4.54) .....	0.02	200
1 (0.454) .....	0.002	20

The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance in appendix A to §172.101 of this subchapter, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

*Hazardous waste*, for the purposes of this chapter, means any material that

is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR part 262.

*Hazmat employee* means a person who is employed by a hazmat employer and who in the course of employment directly affects hazardous materials transportation safety. This term includes an owner-operator of a motor vehicle which transports hazardous materials in commerce. This term includes an individual, including a self-employed individual, employed by a hazmat employer who, during the course of employment;

- (1) Loads, unloads, or handles hazardous materials;
- (2) Manufactures, tests, reconditions, repairs, modifies, marks, or otherwise represents containers, drums, or packagings as qualified for use in the transportation of hazardous materials;
- (3) Prepares hazardous materials for transportation;
- (4) Is responsible for safety of transporting hazardous materials; or
- (5) Operates a vehicle used to transport hazardous materials.

*Hazmat employer* means a person who uses one or more of its employees in connection with transporting hazardous materials in commerce; causing hazardous materials to be transported or shipped in commerce; or representing, marking, certifying, selling, offering, manufacturing, reconditioning, testing, repairing, or modifying containers, drums, or packagings as qualified for use in the transportation of hazardous materials. This term includes an owner-operator of a motor vehicle which transports hazardous materials in commerce. This term also includes any department, agency, or instrumentality of the United States, a State, a political subdivision of a State, or an Indian tribe engaged in an activity described in the first sentence of this definition.

*Hermetically sealed* means closed by fusion, gasketing, crimping, or equivalent means so that no gas or vapor can enter or escape.

*IAEA* means International Atomic Energy Agency.

*IATA* means International Air Transport Association.

# M978 Fuel Servicing Truck

**Cab Seating:** 2 Man

**Axle Configuration:** 8 x 8

**Curb Weight:** 38,200 lbs (17,300 kg)

**Gross Vehicle Weight Rating (GVWR):**  
62,000 lbs (28,123 kg)

**Gross Combined Weight Rating (GCWR):**  
100,000 lbs (45,360 kg)

**Length:** 400.5" (10,173 mm)

**Width:** 96" (2,438 mm)

**Height (over spare tire):** 112" (2,845 mm)

**Track:** 77.82" (1,977 mm)

**Wheelbase:** 210" (5,334 mm)

**Maximum Speed:** 62 mph (100 Kph)

**Tires:** 16.00 R20 XZL Michelin w/tubes

**Number of Tires:** 8 + 1 Spare

**Optional Central Tire Inflation**

**Fuel Capacity:** 155 gal (587 liter)

**Cruising Range (GCW):** 400 mi (644 Km)  
Cross Country Avg.

**Fording:** 48 in (1,219 mm)

**Air Transportability:** C130, C141

**Engine:** DDC Model 8V92TA/445 or 450 hp  
12.1 liter

**Transmission:** Allison HT740/4-speed Automatic

**Transfer Case:** Oshkosh 55,000/2-speed

**Axles:**

**Front -** Oshkosh 46K

**Rear -** Eaton DS480

**Suspension:**

**Front -** Hendrickson RT340 w/equalizing beam

**Rear -** Hendrickson RT340 w/equalizing beam

**Electrical System:** 24V - Start/24 V - Lighting

**Brakes:** Drum type, Air actuated S-Cam

**Steering:** Power Assist, Front Tandem

**Winch, Self-Recovery:** 20,000 lbs (9,072 Kg)

**Winch, Recovery:** N/A

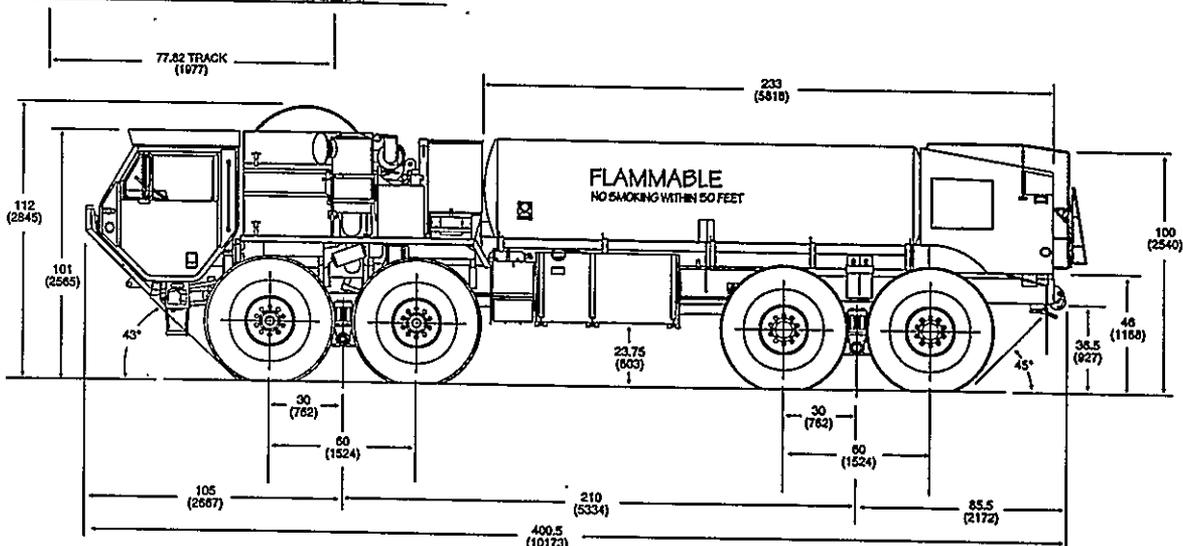
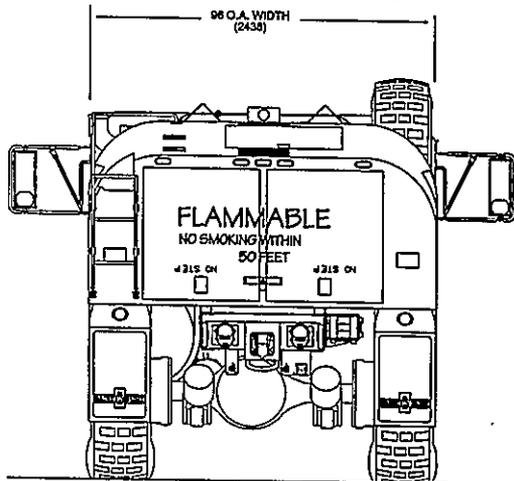
**Retrieval System:** N/A

**Fuel Servicing:** 2,500 gal (9,464 liter) for gas,  
diesel and jet fuel

**Fifth Wheel Loading:** N/A

**Load Handling System:** N/A

**Crane:** N/A



Oshkosh Truck Corporation

ADVANCING TRUCK TECHNOLOGY



